PATTERNS OF POWER · THE CREDENTIAL AXIS

The Distance to the Sword

Where the Interpreter's Credential Sits, What It Predicts About Restraint, Coordination and Repair, and Why It Sets the Radius Within Which a Settlement Can Reach

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with Claude (Anthropic) · 2026

held as tested, not revealed

Preface: what this paper is

The collaboration, the single variable, and the promise that it stands alone.

This paper belongs to the Patterns of Power project and is a collaboration. The questions, the direction, the pattern-recognition and the final judgement are the author's; the synthesis, the drafting and the scholarly retrieval were done with Claude, Anthropic's model, with every load-bearing claim checked against a source before anything was built on it. The method is declared because it is a new way of making knowledge and ought to be visible rather than concealed.

The project asks one question of particular historical orders: how does a distribution of holdings taken by force become an arrangement that armed men will defend rather than contest? How does a warlord's camp become a country? This paper proposes that a single measurable feature of an order — one that can be read off administrative records before anything is known about how the order ended — predicts three things at once that have previously been treated as separate.

The feature is **where the interpreter's credential sits relative to the men competing.** Who can revoke the qualification of the people who read the source of legitimacy? The answer runs on a short ordinal scale, and the scale predicts whether a ruler can be restrained, whether armed peers can be coordinated, and whether a broken authority can be repaired. It also predicts something the project has not previously had a way to state: **the radius within which a settlement can reach at all.**

The paper does four things.

It **defines the variable** operationally, so that it can be scored from appointment and funding records rather than from outcomes — which is what separates a predictor from a description.

It **derives, separately, why one variable governs three different capacities**, because a claim that one thing causes three things is worth nothing until the three mechanisms are shown to be distinct and to run on the same input.

It **tests the scale on four orders** the project has not previously examined through this lens: the First Türk Khaganate on the sixth-century steppe, the Hawaiian kapu system, the Classic Maya city-states, and Latin Christendom in its imperial form. Two of these are drawn from earlier work in a related but different framework, and are re-read here rather than argued against. The four sit at opposite ends of the scale and their outcomes are, on this reading, not four separate histories but one series.

And it states, at length, **a negative finding that limits everything above**. The evidence by which the variable is scored, and the evidence by which its effects are observed, are not independent of each other. An interpreter who could keep his own archive is an interpreter who had an independent credential — which means the method detects the predicted effect exactly where the predictor is present, using records the predictor produced. In its second and worse form, the problem is that for fragmented orders the sacred legitimating apparatus is the very thing that makes the order visible to archaeology at all, so a claim that durable fragmented orders all ran on sacred legitimation may be closer to a description of what can be found than to a finding about the world. This is set out in full, with what would break the circle, because a paper that proposes a variable and hides its measurement problem has proposed a slogan.

The paper stands alone. No prior reading is assumed — not of this project, not of Inner Asian, Polynesian, Mesoamerican or medieval European history, and not of any scholar named. Every borrowed idea is built from scratch in plain words before it is put to work. A reader who has never encountered any of this should be able to follow the whole argument and disagree with it intelligently.

One discipline governs throughout. The orders examined here were built on conquest, tribute exacted from people who could not refuse it, human sacrifice, forced labour, and the binding of populations to land they could not leave. To explain the machinery by which such arrangements acquired their foundations is not to soften them, and the elegance of a mechanism is never a defence of what the mechanism did. This project states that obligation in the phrase *legibility is not pardon*, and discharges it in Part XII rather than in a clause.

The question

Two high priests, the same job description, and opposite behaviour.

In November 1819, on the island of Hawaii, a man named Hewahewa did something that ought to be impossible.

Hewahewa was the *kahuna nui* — the highest ritual specialist of the Hawaiian religious system, the man whose expertise in the sacred prohibitions called *kapu* was the technical foundation of an entire social order. That order had organised Hawaiian life for centuries. It separated men and women at meals, reserved specific foods to specific ranks, required commoners to lie face-down when the highest chiefs passed, and punished violations with death. Hewahewa's institutional existence depended on its continuation more directly than anyone's.

When the young king Liholiho, under pressure from the senior chiefly women, publicly abolished the system, Hewahewa led the burning of the temples himself.

Now set beside him a man in a comparable position seven and a half centuries earlier. In January 1077, at a castle at Canossa in northern Italy, the Holy Roman Emperor Henry IV waited outside in winter weather seeking absolution from Pope Gregory VII, who had excommunicated him and released his subjects from their obedience. Gregory's own institutional position was, on paper, far weaker: he commanded no significant army, held territory a fraction of the emperor's, and had been driven from Rome more than once in his career.

Two men occupying what the standard analysis calls the same role — the head of the interpretive class, the specialist who reads the source of legitimacy for a society that cannot read it for itself. One dismantled his own system at a king's word within days. The other brought the most powerful monarch in Europe to a mountain gate.

The usual explanations are unsatisfying. It is not a difference of courage; we know nothing about either man's private character that would carry the weight. It is not a difference of sincerity; there is no reason to think Hewahewa believed less than Gregory did. It is not the strength of the anchor: the kapu was ancient, universally held, unforgeable by any outsider, and enforced by capital punishment. And it is not scale, because the argument this paper makes runs the same way at the scale of an archipelago and at the scale of a continent.

The difference is that Gregory's qualification was issued somewhere Henry could not reach, and Hewahewa's was not.

That sentence is easy to say and does more work than it looks. Everything below is an attempt to make it precise enough to be scored, to derive what should follow from it, to test it on orders separated by oceans and millennia, and then to establish honestly how much of the test is circular.

The framework, compressed

Possession, ownership, the anchor, and the class that reads it.

Everything that follows rests on a distinction ordinary speech collapses, and it has to be kept separated.

Possession is what force holds now. Nobody presently able to take a thing is taking it. Possession is entirely present-tense and it expires exactly when the capacity sustaining it expires — at illness, at absence, and completely at death.

Ownership is a claim about the future and about other people. To own a field is to claim it will be mine tomorrow while I sleep, mine next spring while I am away at war, and — the decisive part — that when I die you will treat my son as its owner. Ownership is not a relation between a person and a thing. It is a structure of expectations about how other people will behave toward a thing across time, including across my absence and my death.

Force is sovereign over the first and impotent over the second. A sword takes a field today; it cannot promise the field next spring, still less that a boy will hold it. **The part of a holding that force cannot reach is exactly the part that distinguishes ownership from possession, and it must therefore be manufactured out of something that is not force.**

Read "a holding" broadly: an office, a rank, a right to labour, a standing. What must be secured is the *future tense of a claim*, of which land-ownership is only the most familiar instance. One of the cases below concerns a society with no private property in land whatever, and the analysis applies in full.

Why armed men cannot settle unaided

Everyone in a world of armed men would prefer a settlement. That explains the wish and not the fact, because the question is why a settlement holds at the moment when breaking it would pay.

The political scientist James Fearon set out the underlying difficulty in 1995. Nobody can bind their future self: a bargain struck at today's balance of strength will be renegotiated at tomorrow's, so if I expect to be weaker next year, this year's agreement is a promise my counterpart has no reason to keep. Under those conditions

striking first is frequently correct even for a party who sincerely wants peace. This is the engine of warlordism and no amount of goodwill touches it.

The decision that governs, though, is not the aggressor's. It is the *bystanders'*. One armed man considering a seizure is making a forecast about the other houses who will watch. And each of those houses asks: is this my quarrel? Absent a common ground of title, the honest answer is no — my neighbour's holding is his affair, and spending my men on his defence buys casualties and an enemy, and worse, if I intervene and the others do not, I have made myself the next target while they husbanded their strength. So every bystander waits, and each knows the others are reasoning identically, and that shared expectation of inaction is precisely what makes the original seizure safe.

Warlordism is a coordination failure among the men who might have punished it, not a moral failure.

What the anchor does, and what it needs

Now suppose every house's holding derives its rightfulness from one source. The bystander's arithmetic inverts: letting this seizure stand establishes that holdings may be taken, which is a fact about *his* holding. Intervention becomes self-defence at one remove, and he can predict the others are computing the same thing, so acting does not expose him.

Call that shared source the **anchor**. Its work is performed on the bystanders' expectations; it reaches the aggressor only as a forecast he cannot beat. The economist Barry Weingast formalised this structure in 1997 for the relation between a ruler and his subjects, arguing that a sovereign needs only one group's acquiescence, so divided subjects are transgressed at will and united subjects are not, and that a shared standard works by telling everyone what counts as a transgression. This project applies the same structure horizontally, among armed peers.

The requirement that follows organises everything. **A party competing for the spoils cannot be the author of who gets them.** A title granted by a competitor is a forecast about that competitor's health. And the real danger is not that a strong man breaks the rule — breaking is legible and the coalition is trained to punish it — but that he *changes* it, since rule-change does not trigger the coalition at all. The bystander mechanism is keyed to violations of the ground and has nothing whatever to say about a man who alters the ground lawfully. **An anchor must therefore be unforgeable by the current claimants**, which is weaker than requiring it to be supernatural: no amount of conquest could make Timur a descendant of Genghis Khan, and descent is entirely inside the human world.

An anchor also needs to be **determinate** (yielding one answer to who holds this and one to who is next), **common knowledge** (everyone knows it, knows the others know it, and knows they know he knows), and **attached to an office rather than a man**. The third of these is manufactured rather than found: the political scientist Michael Chwe argued in 2001 that public ceremony works not by transmitting a message to each person but by letting each person *see everyone else receiving it*, which is why a coronation before assembled magnates is a machine for producing common knowledge and why its content matters far less than its visibility.

Finally, an anchor says who is right and does not enforce itself. The **floor** is the coercive capacity that makes a verdict land. An anchor without a floor produces verdicts that fall still-born; a floor without an anchor produces verdicts that expire with the army.

The class this paper is about

An anchor does not read itself either. Somebody says what it requires — which prohibition applies, which claimant descends from whom, which day the ceremony falls, which grant is valid. Call them the **interpreter class**: priests, scribes, jurists, scholars, calendar specialists.

They exist because of a structural fact rather than a cultural one. Adam Smith's division of labour is also a division of *knowing*; Friedrich Hayek observed in 1945 that the knowledge a society runs on exists nowhere in complete form but in fragments among millions of people. So in any society past a certain complexity every person must delegate most of his knowing to sources he cannot check, and a position comes into existence between the many and what they cannot reach. Somebody sits in it.

Two further things about that position matter here. First, it is occupied by people whom the cognitive scientists Dan Sperber and Hugo Mercier would say are trusted *conditionally*: a mind that cannot check a claim checks the source instead, reading cues of competence, benevolence, consensus, coherence and costly commitment. At small scale those cues are honest, because the man claiming competence is the man whose competence you have watched for thirty years. At civilisational scale the cue and the competence come apart, and what can actually be verified is that a man holds the *marks* — the collar, the title, the office. Second, a position carrying that much structural power is, over a long enough period, captured; not by conspiracy but by gradient, because it is worth more to control than to leave alone.

This project's immediately preceding paper established the finding that this one begins from. **The interpreter does two jobs, not one, and they have opposite exposure to capture.** The *vertical* job is telling the apex no — refusing a divorce,

denying a tax, withholding a coronation. The *horizontal* job is making every armed man's title checkable against a single source, so that an attack on any of them registers with all of them. Capture destroys the first almost immediately, because a man whose living and rank the ruler controls cannot make a refusal stick. It leaves the second untouched, because the horizontal job requires nothing of the interpreter except that he continue to be **the single place titles come from**. He need not be brave. He need only be singular.

That finding raises the question this paper answers. If capture is the variable, capture by whom, of what, and how is it measured before the fact?

Part I — The variable, defined so it can be scored

Three questions, a three-point scale, and one modifier.

A variable that can only be assigned after the outcome is known is not a variable; it is a restatement of the outcome. So the scale below is built from facts that appear in ordinary administrative records — appointments, salaries, land grants, recruitment — and that are typically recorded by the *ruler's* establishment rather than the interpreter's. This matters, and Part IX returns to why.

The primary question: who can revoke the qualification?

Not who pays, not who likes whom, not who is more devout. **Who can take away the thing that makes this man's reading authoritative?** If the answer is "the ruler," the interpreter is inside the ruler's reach. If the answer is "an institution the ruler cannot touch," he is outside it.

That yields three positions.

The fused position. There is no separate qualification. The claimant is the interpreter. The man who commands is the man who reads. Either no distinct interpretive class exists, or one exists but is recruited from, and its authority derived from, the same principle that qualifies the rulers — so that in the decisive case the interpreter and the claimant are the same set of people.

The domestic position. A separate interpretive class exists with a genuine qualification, and the qualification is issued inside the ruler's system: he appoints its head, sets its examination, funds its colleges, licenses its practitioners, or the class is recruited by a criterion he administers.

The foreign position. The qualification is issued outside the reach of any domestic claimant. Somebody who is not a party to the contest — a foreign see, a distant patriarchate, an office in another polity — confers it, and no local ruler can confer or withdraw it.

The scale is about *issuance*, not sentiment. A foreign-credentialled interpreter may be entirely loyal, corrupt, or bought in practice; what matters is that the ruler cannot remove his standing, which changes the structure of what he can do even when he chooses not to do it.

Two secondary questions

Who feeds him? Funding modifies distance without defining it. Perpetual endowment is the most independent, since land given in perpetuity cannot be withheld year by year; terminable grants and salaries are the least. A foreign credential with a salaried livelihood is more capturable in practice than the scale alone suggests, and a domestic credential resting on perpetual endowments is less so.

Is there a corporate body? Separate from distance, and the paper's one genuine complication: does an *institution* exist that is distinct from any individual occupant — a council, a synod, a college, a chapter with procedures for acting collectively? This turns out to govern one of the three predicted capacities on its own, and the Maya case is what forces the distinction.

The modifier: can the audience check?

There is one condition under which the whole variable matters less, and stating it now prevents the argument from overreaching.

Credential distance matters because the audience cannot verify the anchor for itself. That is the entire premise: people delegate knowing because they cannot check, and they check the source instead. Where the anchor is **publicly verifiable by the people it binds**, the interpreter's independence matters proportionally less, because the audience is the check.

A law recited aloud in a public assembly every summer, in the language the assembly speaks, is verifiable: if the reciter alters it, several hundred men who heard it last year will notice. A liturgy in a dead language, a genealogy known only to specialists, or a calendrical calculation requiring twenty years of training is not verifiable by anyone outside the class. **The more esoteric the anchor, the more the distance to the sword governs everything; the more public it is, the less.**

This is why the medieval Icelandic Commonwealth is not a counter-example to what follows even though its interpreter was elected by the very chieftains he was to bind. The Icelandic *lawspeaker* was chosen for a fixed term by the assembly of the competitors, which by the scale above is close to fused — and the order ran for three centuries without any executive at all. The reason is that the anchor was the law itself, recited from memory in public, one third each year, in Old Norse, before the men it governed. The audience could check him. Distance was not needed because verification was available, and the substitution is exact: **credential distance is a proxy for a check the audience cannot perform itself.**

Venice makes the same point from the other direction: an anchor that is a randomised electoral procedure, performed in public with drawn lots, needs no learned class to interpret it, and Venice accordingly has the least powerful interpretive stratum and one of the longest runs in the archive.

Everything below concerns the ordinary case, in which the anchor is esoteric and the audience cannot check.

Part II — Why one variable governs three capacities

Three separate derivations that happen to run on the same input.

A claim that one variable predicts three things is worthless until the three mechanisms are shown to be distinct. Here they are, derived independently.

Restraint: why only a foreign credential can say no

To constrain the apex, an interpreter must **survive constraining him**. That is the whole of it.

A refusal that costs nothing is not a constraint; it is an opinion. A refusal that ends the refuser's career, income and successor's prospects will be made occasionally by heroic individuals and will never become an institutional capacity, because the institution learns. So the question is not whether an interpretive class is brave but whether the ruler holds the instrument that punishes bravery.

In a fused order the question does not arise; the man who would be refused is the man doing the reading. In a domestic one the ruler holds the instrument by construction: he appoints, examines, licenses or funds. What one predicts of a domestic credential is therefore not silence but a specific pattern — **heroic individual refusals and no institutional capacity to compel.** Remonstrating officials who die admirably and change nothing. That pattern is the signature of the domestic position and it should be looked for as such.

Only where the credential is foreign can a refusal be survived, because the punishing instrument is held by nobody in the room.

Coordination: why a domestic credential is enough and a fused one is not

The horizontal job needs the interpreter to be *singular*, not independent. One place that titles come from; that is all. Which is why a thoroughly bought interpretive class can maintain coordination for centuries — the Ottoman religious establishment, whose senior office was appointed and dismissed by the sultan, or the Chinese

examination system, in which the state set the syllabus and the pass list, both of which sat above orders of exceptional durability.

In a fused order the requirement fails, and it fails for a reason that is structural rather than contingent. **If the claimant is his own interpreter, then there are as many sources of title as there are claimants.** Each can read the anchor as favouring himself, and the anchor cannot arbitrate, because arbitration is exactly the act that requires somebody who is not a party. So a fused order can hold together perfectly well while there is only one claimant — and cannot answer the first question that matters, which is which of two claimants is right.

The observable consequence: a fused order should look strong until its first genuinely contested succession, and then fail at it. The strength before the test is not an illusion; it is simply not a test.

Repair: why this one needs corporateness, not distance

The third capacity is the one that separates the variables, and it comes from a finding this project established in a different setting.

When an authority **forks** — when two men each hold the same qualification and each says the other is invalid — the failure requires nobody to do anything wrong. An authorisation is a statement that something is *uniquely* so, and two sources make it a statement about which source you asked. Coercive capacity can be divided without loss, since half an army is still an army; authority cannot, because half an authority is a dispute. And force cannot settle it, because seizing an office whose whole value is its non-seizability destroys the thing seized.

What repairs a fork, on the evidence of the one well-documented case, is a combination: an outside power with a floor, willing to compel the parties into a room, plus a *donation of legitimacy from inside* — one of the claimants conceding in a form that transmits his standing to the process rather than to a rival. Attempted without both, the repair merely produces a third claimant.

The inside donation requires an **institution with procedural standing that is not identical to any occupant.** A council, a synod, a college. And that is corporateness, not distance: an interpretive class can be domestically credentialled and still corporate, and a class can be foreign-credentialled and, if it consists only of a single person, have nobody with standing to mend it.

In a fused order there is neither. There is no institution at all — only men holding qualifications in their own bodies. **A fork in a fused order is unrepairable in principle**, and the only available resolution is the elimination of one party, which

resolves nothing about the anchor and merely returns the order to the condition of having one claimant until it has two again.

Summary of the derivations

Fused. Restraint impossible, since the man who would be refused is the man reading. Coordination fails at the first contested succession, since there are as many sources of title as claimants. Repair impossible, since no body has standing.

Domestic. Restraint reduced to heroic individuals with no institutional capacity. Coordination works, and can last centuries. Repair possible where the class is corporate.

Foreign. Restraint possible and observable. Coordination works. Repair possible where the class is corporate.

Three mechanisms, three different reasons, one input. That is the claim, and the next four parts test it on orders that had no contact with one another.

Part III — Fused on the steppe: an anchor nobody could forge and nobody could read

The First Türk Khaganate, 552–603, as the scale's lower bound.

The case is treated briefly here because this project has worked it in full elsewhere; it is included because it establishes what the bottom of the scale looks like when nothing else is confounding it.

In 552 a chieftain named Bumin, of a clan called Ashina, destroyed the confederation he had served on the Mongolian steppe and declared himself khagan. Within a generation his family governed from Manchuria towards the Black Sea — the first transcontinental empire in Central Asian history, negotiating as an equal with Byzantium and Sasanian Persia. By 581 it was in civil war among four claimants. By 603 it had divided permanently into eastern and western khaganates that thereafter treated one another as rivals.

The anchor was specific and can be named in a phrase: **descent in the Ashina clan, holding a mandate from Tengri, the sky.** Score it and the results are instructive. Unforgeable: completely — no conquest could make a man Ashina, which is the strongest property in the project's catalogue. Common knowledge: yes, broadcast in every available register. Determinate: **no.** The anchor specified the lineage and said nothing whatever about which member, and no rule — not primogeniture, not seniority, not election by a defined body — selected among them.

Now the diagnostic that matters here. **Who interpreted it? Nobody.** Tengrism at this date had no closed canon, no clergy holding a credential, and no institutional body distinct from the men who commanded. The khagan was his own interpreter, and heaven's favour was read off the only evidence available, which was success.

That is the fused position in its pure form, and all three predictions land. No restraint: nobody ever told a khagan he was wrong, and the order did not need that to function. No coordination past the first test: in 581 the four claimants had no common source to appeal to, because every available interpreter was a claimant, and the standard collapsed into the proposition that heaven favours whoever wins. No repair: there was no assembly with recognised competence, no law attributed to the founder,

no corporate body from which legitimacy could be donated — so the fork of 581 could only be fought out, and when it was fought to a draw the order divided permanently.

Two details are worth carrying forward. The first is that the arrangement which produced the fork was built at the founding: Bumin made his brother Istämi ruler of the west with his own armies, his own diplomacy and his own capital, which divided the floor cleanly and left the anchor undivided and shared. Floors divide without loss; anchors do not. The second is that this order's own monumental self-legitimation — the stele raised around 581–584 for Taspar Qaghan in the Orkhon valley — is written **in Sogdian**, the language of the khaganate's subject merchant scribes, because Turkic had not yet been reduced to writing. At the height of its power the empire could not staff its own seam.

Hold the shape: **unforgeable anchor, no interpreter, fatal at the first contested succession.** The next two cases have interpreters and still score as fused, and the reason is what makes them interesting.

Part IV — Fused in the Pacific: the anchor that authored nothing

Hawaii before 1819, and why a system that looked like a settlement was not one.

The Hawaiian case is the most valuable in this paper, because it separates two things the project has always seen together and is therefore the case that tests whether the variable is doing real work.

What the system was

The Hawaiian archipelago was settled by Polynesian voyagers whose descendants elaborated, over a thousand years, a highly ranked society organised around **mana** — a genuine supernatural force, concentrated in high-ranking persons by virtue of their genealogical connection to the gods, and dangerous to those whose own mana was insufficient to engage with it safely.

The **kapu** system was the institutional management of mana's unequal distribution. The word denotes the condition of a thing set apart by sacred prohibition, simultaneously sacred and forbidden. Its rules touched everything: men and women ate separately; specific foods — pork, bananas, coconuts, certain fish — were forbidden to women entirely; commoners could not let their shadow fall on a chief, could not touch a chief's possessions, and prostrated themselves face-down when the highest-ranking passed. Violation was punishable by death, and the condemned supplied the victims for the temple sacrifices that the gods were held to require, which is an unusually direct instance of an enforcement mechanism feeding its own ceremonial demand.

Materially, the system naturalised extraction. Land was organised into *ahupua'a* — wedge-shaped divisions running from mountain to sea so that each contained the full range of ecological zones — administered by ranked chiefs beneath a paramount, and worked by commoners who rendered tribute annually during the four-month *makahiki* festival. The commoner paying tribute was not being taxed; he was contributing to the maintenance of the cosmic order on which his own subsistence depended, since the chiefs' correct handling of mana was the precondition of rain, fish and taro.

By the four-property test this is an excellent anchor. Determinate about rank, unforgeable by any outsider, common knowledge to the point of governing what people ate, and enforced by capital punishment. And it was old.

Where the credential sat

The *kahuna* were a real interpretive class: specialists in prayer sequences, ritual action, genealogical tradition and the astronomical knowledge that maintained the sacred calendar, with knowledge transmitted through lineages and formal apprenticeship. On the face of it this is the domestic position.

It is not, and the reason is that **the anchor itself was located in the bodies of the claimants.** Mana was not a doctrine the kahuna held and the chiefs obeyed. Mana was a property of ranked persons, and the highest-ranking persons were precisely the men and women competing for paramountcy. The chief did not receive his authority from the kahuna's reading; he *was* the reading. He performed the major temple ceremonies himself.

That places Hawaii in the fused position with what might be called a domestic shell: a technical class existed, doing genuine specialist work, whose qualification was issued by the same rank principle that qualified the rulers, and which therefore had nothing to stand on that a paramount could not overrule by being higher-ranked.

Score it against the derivations. **Restraint:** absent, and not because the kahuna were servile — because there was no position from which a refusal could be made. There is no Hawaiian Canossa and there could not have been one. **Repair:** absent; no corporate body, no council of kahuna with standing across chiefdoms, no procedure. **Coordination:** and here the case delivers something the project had not seen.

The finding: the kapu authored no elite title

Hawaiian chiefly tenure ran on a practice called **kālaiʻāina**, the carving of the land. On the accession of a new paramount, the *ahupuaʻa* were redistributed among his supporters. This was practised not only upon conquest but traditionally at the peaceful ascension of a new mōʻī, and on the death of one chief and the accession of another, lands were re-apportioned; some of the previous managers would lose their lands, and others would gain them. The distribution was revocable, and land was never bought or sold.

Read that against the framework's opening distinction and the conclusion is unavoidable. **Chiefly tenure in Hawaii was possession with a ceremony, not ownership.** The holding did not survive the grantor's death; it was re-granted, every

reign, by whoever now held the highest mana. The one thing an anchor exists to manufacture — the future tense of a claim, its persistence across the death of the man who conferred it — was exactly what the kapu system did not manufacture for the armed elite.

So the kapu was a **mass-compliance technology of extraordinary quality and not a settlement among armed men at all.** It made extraction cheap, and it did nothing whatever to solve the bystander problem among chiefs. Which is precisely what the record shows: continuous chiefly warfare across and within the islands until Kamehameha unified the archipelago between 1795 and 1810 by conquest, with muskets and cannon and foreign advisers — that is, by floor rather than by anchor.

This is the case's contribution to the general argument. **Anchor quality and horizontal function are independent.** One can have an ancient, unforgeable, universally-held, ferociously enforced anchor that performs no coordination among armed peers whatever, because the horizontal function is not a property of the anchor. It is a property of the *relation* between an anchor and an interpreter who is not a claimant. Where that relation is missing, the anchor can still bind the mass and cannot bind the elite, and the two audiences come completely apart.

1819, and why it looks impossible until it doesn't

Kamehameha I died in May 1819. Within months his son Liholiho, under sustained pressure from Kaʻahumanu — Kamehameha's politically formidable favourite wife, who held the co-regent office of *kuhina nui* and whose rank was beyond challenge — publicly ate with the high-ranking women, in violation of the most visible kapu of all. He then ordered the temples burned, the images destroyed and the prohibitions lifted. The missionaries who would supply the replacement framework had not yet arrived; they landed in April 1820, six months later.

The standard puzzle is why a ruling class would dismantle the mechanism of its own authority. The framework's answer has three parts and all three are consequences of the fused position.

First, it was not a violation. Liholiho did not break the kapu as a private man. He ate publicly *as king*, which made the violation a royal act, which made it lawful. This is the framework's central danger executed perfectly: the strongest man did not break the rule, he changed it, and rule-change does not trigger the bystander coalition, because the coalition is keyed to transgressions of the ground and has nothing to say about a man who alters the ground. Nobody rose, because on the system's own terms nothing had been transgressed. And the only reason he *could* alter it is that in a fused order the anchor sits in the ruler's own person — which is precisely the configuration this project

has repeatedly found lethal, and which the Hawaiian case shows can persist for centuries as long as the anchor's job is confined to the mass.

Second, Hewahewa had nothing to refuse with. The *kahuna nui* led the burning himself. Read as character this is contemptible or pragmatic depending on taste; read structurally it is not a choice at all. His credential was issued by the same rank system the king embodied. There was no foreign see, no closed canon he could cite against a living chief, no endowment independent of chiefly grant, and no corporate body to convene. Set him beside the Ethiopian church, whose head was appointed from Alexandria and sent from Egypt for something close to sixteen centuries and who was therefore structurally uncapturable by any Ethiopian emperor, and the difference is not devotion. It is issuance.

Third — and this is why the abolition could be so complete and so cheap — nothing trembled. The test of a successful anchor-replacement in this project is whether any title came into question across the switch. Hawaii passes it trivially, and the earlier study noticed the fact without drawing the conclusion: the land tenure system, the tribute obligations, the chiefly hierarchy and the material arrangements *all continued* after the abolition, essentially unchanged, for a further three decades. Of course they did. **The ritual system had never been authoring them.** The chiefs held by mana and by force, re-granted each reign; removing the ceremonial apparatus removed the mass's reason to comply cheaply and removed nothing at all from the elite's arrangements.

What did eventually author Hawaiian title was the **Māhele of 1848**, which converted a system of hierarchical, revocable use-rights into Western fee-simple ownership — and which, in doing so, handed most of the land to the chiefs who could navigate the new legal system and to foreigners who could buy it, while dispossessing the commoners who could not. Title arrived, and it arrived in somebody else's system.

The timing, restated

One further observation the variable makes available. The kapu was centuries old. The thing it was being asked to authorise in 1819 — a single paramount over the whole archipelago — was twenty-four years old, assembled by conquest between 1795 and 1810 and never once transmitted.

An ancient anchor asked to underwrite a brand-new distribution is not the same object as an old settlement. On that reading Hawaii 1819 is structurally closer to the steppe in 581 than it looks: a novel order of unprecedented extent, collapsing at its founder's first succession, because the anchor could not answer a question of a kind it had never been asked.

Part V — Fused in the rainforest: the king who was Keeper of the Holy Books

The Classic Maya, and a title that settles the classification.

The Maya lowlands between roughly 250 and 900 CE held dozens of independent city-states, never unified, each governed by a **k'uhul ajaw** — "divine lord" — whose authority rested on descent traced to creator deities and whose central functions were ritual: performing the bloodletting that opened communication with ancestors, timing agriculture and warfare by the cosmic calendars, dedicating the monuments. Cities warred, formed tributary hegemonies, and were eclipsed and revived, and the system as a whole ran for six centuries and more.

An earlier study in this series compared the Maya to the Holy Roman Empire and found the two structurally convergent: sacred rulers, interpretive classes monopolising restricted literacy, extraction framed as cosmic duty, fragmentation serving elite interests. That reading is not wrong about what the two share. This paper argues that the two are identical on the anchor and **opposite on the interpreter**, and that the difference generates both the similarities and the divergence.

Where the Maya credential sat

There was a real interpretive class. Priests and scribes held exclusive command of the 260-day and 365-day calendars and the Long Count, of the hieroglyphic script, and of the astronomical calculation that timed everything — Venus cycles tracked to within minutes across a 584-day period. That is genuine, esoteric, decades-of-training expertise of exactly the sort the modifier in Part I says makes credential distance decisive.

And the credential was issued inside the dynasty. Writing was a royal prerogative rather than a craft practised by commoners; signed works reveal that scribes were often royal princes — at Copán the sculptor of the Rosalila temple facade was a member of the ruling dynasty, and at Palenque the carvers of the sarcophagus panels were titled nobles. One reading of the pattern is that a son of a ruler who was not the crown prince became a scribe. The nobility, from whom priests and scribes were drawn, were people of royal blood who were not the king, and such work was kept in the royal family and passed to their children.

That alone would score as domestic. What moves it to fused is a detail of titulary. Two scribal titles are attested: *aj tz'ihb*, the royal scribe, usually a member of the royal family; and *aj ch'ul hun*, the Keeper of the Holy Books — a title so closely associated with the *ajaw* title that an ajaw always held the *aj ch'ul hun* title simultaneously.

The Maya king was, by title and permanently, the Keeper of the Holy Books. The interpreter's office was not near the sword; it was worn by the sword, not as a usurpation but as a constitutive feature of kingship. This is Henry VIII's Supreme Headship, except that it was never a rupture — it was there from the beginning, so no contemporary attacked it as an innovation, and there is no Maya equivalent of Thomas More because there was never a moment at which anything changed.

The predictions, and a warning the discipline itself supplies

Restraint: none is attested anywhere. No Maya text records a priest constraining a king, refusing a rite, or declaring a war improper.

That absence has to be handled carefully, and the historiography of the field supplies the warning better than I could. Until the discovery that Maya stelae depict kings rather than high priests, the Maya priesthood was a main scholarly concern; from the 1960s dynastic decipherment came to dominate, and a concept of royal "shamanism," propounded chiefly by Linda Schele and David Freidel, took its place.

Read that as evidence rather than as a footnote. **An entire discipline spent decades misidentifying kings as priests, because in Maya iconography the two were not distinguishable.** That is not a failure of scholarship. It is the finding, delivered by the history of the field's own errors: there was nothing to distinguish, because the same men in the same regalia performed both offices. A discipline that had to be told, by decipherment, that the figures on the stelae were rulers is a discipline whose subject fused ruler and interpreter completely.

Repair: none available. There was no council of priests with standing across polities, no synod, no procedure by which two rival claims could be adjudicated by anyone who was not a claimant. Each court held its own specialists.

Coordination: and here the Maya case does something the Hawaiian case does not, which is why both are needed.

Within a city-state, the horizontal function worked. The ajaw was the single author of title for the subordinate lords — the *sajal*, the second- and third-tier holders — and those grants were checkable against one source, which is the whole requirement. Maya polities were internally stable enough to build for centuries and to transmit dynasties across dozens of reigns.

Between city-states, there was no source at all. No k'uhul ajaw held from anybody; each held directly from the gods, in his own person, as Keeper of his own Holy Books. So there was nothing above the ajaws, and there could be nothing, because in a fused order an authority above the claimants would have to be held by a claimant. The consequence is exactly what the record shows and what the earlier study read as a virtue: six centuries of continuous, elaborate, ritualised warfare between polities that never consolidated and never settled.

The revision this forces

The earlier study treats Maya fragmentation as an elite strategy — decentralisation preferred because it prevented any single rival capturing the centre. The variable suggests a less intentional reading. **Fragmentation was not chosen; it was the maximum radius a fused anchor can reach.** A source of title lodged in a claimant's own body cannot extend past the territory that claimant personally commands, because the moment it is asked to adjudicate between two such bodies it has nothing to say. The Maya did not decline to unify. They lacked the instrument with which unification is done, and so did the Hawaiians, and so did the Türks.

Part VI — A foreign credential in Latin Christendom: the credential nobody in the room could issue

Canossa, Worms, Tordesillas, Augsburg — one variable, four consequences.

Now the other end of the scale, and the same three predictions run forward rather than backward.

The Holy Roman Empire that emerged from Otto I's imperial coronation in 962 was, in the relevant respects, structurally similar to the Maya lowlands: hundreds of effectively autonomous territorial units, an emperor with no permanent capital, no standing army under his direct command, no centralised taxation, and no power to appoint or remove the rulers of the major territories. Peter Wilson's formulation — first among equals, supreme in dignity and dependent on cooperation for actual governance — describes the k'uhul ajaw's position in his hegemony as accurately as the emperor's in his empire.

The difference was the interpretive class, and it was not a difference of degree.

The credential

The bishops who staffed the empire's administration, ran its schools and scriptoria, performed its coronations and controlled its information network held a **spiritual qualification issued from Rome**. That the emperors fought for two generations to control episcopal appointment is itself the proof that they could not simply do it; and the settlement that ended the fight — the Concordat of Worms in 1122 — divided the thing in two, giving the emperor the temporal endowments and reserving spiritual investiture to the church. The office that conferred the credential was outside the empire, held by a man no emperor appointed, and possessed of an independent income and an institutional base no single monarch controlled.

That is the foreign position, and unlike the previous three cases the classification is not a judgement call. It is the explicit content of a treaty.

Restraint

The prediction is that restraint becomes possible and observable, and Latin Christendom is where the archive is full of it. Gregory VII excommunicated Henry IV and released his subjects from obedience; Henry came to Canossa in January 1077 and waited. Whatever the political manoeuvring behind the scene — and there was a great deal, and Henry recovered and later drove Gregory from Rome — the point is that the move existed at all. **No Maya text, no Hawaiian tradition and no steppe source contains anything of the kind, and on this reading they could not.**

Compare the domestic signature. The Ottoman religious establishment produced learned opinions that mattered when they aligned with a court faction and no *şeyhülislam* who denied a sultan and made it stick. Imperial China produced remonstrating officials who objected magnificently and died, framing their objections as loyal instruction to a ruler who had strayed from the classics — which is the vocabulary of a servant, not of an independent bench. Heroic individuals, no institutional capacity. That is what a domestic credential looks like, and it differs from both the silence of a fused order and the constitutional war of a foreign one.

Coordination, and the radius

The horizontal function ran, and the more interesting fact is *how far*. A bishop in Saxony, a duke in Bavaria, an abbot in Swabia and a free city on the Rhine all held standing that derived, ultimately, from one source that none of them and no emperor could revoke. That is a single author of title spanning hundreds of units across centuries — a radius no fused order in this paper approaches.

The most striking demonstration is at the outer edge. In 1493–94, two sovereign kingdoms with armies and fleets divided the unexplored world between them along a line drawn under the authority of a man with no army. Alexander VI's bulls set the original partition; Spain and Portugal then renegotiated the meridian bilaterally at Tordesillas in 1494 and a later pope confirmed the revision. The nuance matters — the crowns bargained over where the line fell — but the office they were bargaining *under* was one neither could issue and neither could seize.

And the limit of that radius is the paper's cleanest confirmation. **Tordesillas bound exactly the states that recognised the credential and nobody else.** France, England and later the Dutch dismissed it, and after the Reformation removed recognition across half of Europe the instrument was worth nothing to the parties who had left. The foreign-credential radius is the area of recognition — no larger, and no smaller.

Repair

The last prediction is the one a fused order fails absolutely, and here it is met twice.

When the Latin church itself forked — two and eventually three men each claiming to be the one pope, a failure requiring nobody to do anything wrong — the fork was repaired: an outside power with a floor compelled the parties into a council, and one claimant donated his standing to the process rather than to a rival, which is what a corporate institution with procedural competence makes possible. Attempted without both halves, at an earlier council, the same effort had merely produced a third pope.

And when the empire's ideological ground forked far more deeply at the Reformation, the empire **institutionalised the division rather than dying of it** — Augsburg in 1555, then Westphalia in 1648, converting an unresolvable question about which reading was true into a settled question about which reading applied where. It survived until Napoleon dissolved it in 1806, eight hundred and forty-four years after the coronation that began it.

Set that beside the Maya. When divine kingship came under sustained stress in the southern lowlands in the Terminal Classic, the institution did not fork and get mended; it **dissolved**, city by city, and was not reconstituted there. There was no body with standing to mend it, and the reason is the *aj ch'ul hun* title: an authority worn permanently by each claimant has no existence apart from the claimants, so when the claimants fail it does not survive them.

Part VII — The series, and what the variable actually sets

Four orders, no contact, one ordering.

Laid out together, the four cases are not four histories. They are one series with one input.

First Türk Khaganate — fused, no corporate body. No restraint, no coordination past the first contested succession, no repair. Fractured at twenty-nine years and divided permanently at fifty-one.

Hawaii — fused, with a technical class. No restraint (there was no position from which to refuse). No coordination among the armed at all: elite title was re-granted at every accession, so the anchor did the mass job superbly and the elite job not at all, and the archipelago warred until it was unified by muskets. No repair; the system was abolished in a season by a rule-change nobody could treat as a violation.

Classic Maya — fused by titulary. No restraint attested, in a record whose own decipherment history shows ruler and interpreter were iconographically indistinguishable. Coordination *within* each polity, none between them. No repair: divine kingship dissolved rather than being amended.

Latin Christendom — foreign credential, corporate. Restraint observable to the point of constitutional war. Coordination across hundreds of units for eight centuries, reaching at the limit to a partition of the globe agreed by two crowns under an office neither could seize. Repair achieved twice, once for the papacy itself and once for the empire's confessional fracture.

The claim this licenses

The project's earlier work established that an anchor is a technology for scaling coordination beyond the number of people who can watch each other — that a small enough group needs no anchor, because mutual observation does the same work, and that a hierarchy needs one because it is too large for the room.

This paper adds the missing quantity. **Credential distance sets the radius.**

Where the credential is **fused**, the radius is the territory the claimant personally commands, because a source of title lodged in a claimant's body cannot arbitrate between two such bodies. Whatever lies beyond that boundary is settled by force or not

at all. Hawaii's radius was an island; the Maya's was a city and its dependencies; the Türks' was whatever one khagan could ride to.

Where it is **domestic**, the radius is the state that issues the credential. The Ottoman and Chinese orders coordinated enormous territories and had no instrument whatever for settling their relations with neighbouring powers that did not recognise their issuing authority — which is why both ran permanent frontier wars against peers.

Where it is **foreign**, the radius is the area of credential recognition, which can be far larger than any single state and is bounded by belief rather than by capacity. Latin Christendom's radius was Latin Christendom, and it ended precisely where recognition ended.

Which reframes what the earlier study called the Maya's and the Empire's shared "sacred decentralisation." Both were decentralised; only one had an instrument that reached across the units. The Maya fragmentation was not a strategy that served elite interests. It was the maximum extent a fused anchor can cover, and six centuries of warfare is what that limit looks like from inside.

Part VIII — What the variable does not explain

Three things it gets wrong or leaves untouched, stated before the objections section proper.

It does not predict duration. The Maya ran six centuries in the fused position; the Türks lasted twenty-nine years. Both scores are the same and the outcomes differ by an order of magnitude, because duration depends on how often the anchor is asked a question it cannot answer, and that depends on demography, geography, the survival of founders and a dozen other things. What the variable predicts is *which question is fatal*, not when it arrives. A fused order that is never asked to adjudicate between two claimants will look indefinitely healthy.

It does not predict quality of life, and the correlation runs the wrong way from any comfortable reading. The foreign-credential order in this set is the one that reached furthest, coordinated most, and — as Part XII sets out — organised persecution, crusade and the partition of other people's continents at a scale the fused orders could not have contemplated. Reach is reach. It is not virtue.

And it says nothing about the mass audience. The Hawaiian case is the demonstration: an anchor that did no elite coordination whatever still made an entire population render tribute cheaply for centuries. The variable governs the settlement among armed men and is silent about compliance below them, and the two can come completely apart. Any reading of this paper that treats a low score as a weak legitimating system has confused the two audiences.

Part IX — The negative finding: the archive is made of the thing being measured

Two circularities, of which the second is worse.

Everything above depends on evidence, and the evidence is not independent of the hypothesis. There are two distinct problems and they need separating, because one is repairable and one may not be.

The first circularity: restraint is visible only where the credential was independent

The vertical prediction says that restraint is possible only where the credential is foreign. The evidence offered is that Latin Christendom has a documented record of interpreters constraining rulers and the other three cases do not.

But consider what produces such a record. A refusal enters history when somebody writes it down and preserves it, and the party with an interest in preserving an account of clerical resistance is the clergy. Latin Christendom's interpreters had their own scriptoria, their own libraries, their own chronicle tradition and their own continuous institutional memory — and they had those things *because* their credential was independent. The Maya textual corpus, by contrast, was commissioned almost entirely by the apex; so was the Hawaiian genealogical tradition; so, at one remove, is everything we know about the Türks, since the record is the neighbours' and the neighbours cared about khagans.

So the method detects the vertical function exactly where the interpreter could keep an archive, which is exactly where the credential was independent. An independent archive is not an incidental correlate of an independent credential. It is nearly the same fact. We would not be able to see a Maya priest constraining a king even if one had, because the only writing surfaces were commissioned by kings.

That is a serious problem and it is *partly* repairable, in a way worth stating precisely. **The predictor and the outcome are recorded by different parties.** Appointment records, salary registers, grants of endowment, examination rosters and titulary are kept by the *ruler's* establishment, because rulers need to know whom they appointed and

what they paid. So the variable can be scored from royal archives even where the interpreter left none — the *aj ch'ul hun* title is known from royal monuments; the Ottoman appointment of the *şeyhülislam* is known from state records; the Concordat of Worms is a treaty. The outcome — whether a refusal occurred and stuck — requires the interpreter's archive.

Which yields an honest and uncomfortable statement of the paper's status. **The coordination and radius predictions are testable, because their evidence is administrative and survives in royal records. The restraint prediction is only half-testable, and its negative half is not testable at all on any order whose interpreters left no independent record.** Absence of documented restraint in the Maya case is consistent with the hypothesis and is not evidence for it.

The second circularity: for fragmented orders, the apparatus is the archive

The worse problem is not about restraint but about the sample, and it undermines the comparative argument that this paper inherits.

The earlier study's strongest move was convergence: two civilisations with no contact, no shared heritage and no possible transmission arrived at the same architecture — sacred rulers, interpretive classes, monumental legitimation — therefore the architecture is structural rather than cultural. That argument is powerful and it may be circular.

Consider what makes a *fragmented* order visible to us at all. A centralised state leaves administrative documents, tax rolls, law codes, a capital. A fragmented order — dozens of small competing units with no centre — leaves almost nothing except **the legitimating apparatus itself**: the stelae, the cathedrals, the emblem glyphs, the ceremonial plazas, the inscribed dynastic claims. That apparatus is precisely the common-knowledge machinery this project studies. It is monumental *because* it had to be seen by everyone at once.

Which means: a fragmented polity that ran on sacred legitimation is one we can find. A fragmented polity that did not is one that left neither administration nor monuments, and is therefore either invisible or indistinguishable from an undifferentiated scatter of villages.

"All durable fragmented polities ran on sacred legitimation" may be closer to a statement of what can be found than to a finding about the world. The variable under study is the variable that generates the archive. This is a sharper form of survivorship bias than the usual one: not merely that failures left no records, but that

the presence of the causal variable is what produces the record in which the variable is observed.

What would break the circle

Three things, in increasing order of difficulty.

Score the variable from royal archives only, and preregister. Because appointment, funding and titulary survive in rulers' records, the scale can be assigned to a set of orders *before* any outcome evidence is consulted, and then the outcomes checked. This does not fix the restraint asymmetry but it removes the temptation to read the score off the result.

Take the negative sample from the neighbours. Fragmented and segmentary orders that built no monuments are described, sometimes in detail, by literate powers next door — the Chinese frontier record on tribal confederations, Greco-Roman ethnography on Gallic, Germanic and Thracian coalitions, and the later colonial-era descriptions of stateless societies, all read with full allowance for their propaganda. If fragmented orders lacking sacred legitimation turn out to be common and short-lived, the convergence claim survives in weakened form. If they turn out to be common and *durable*, it does not.

And test against the pre-consolidation archaeology. The Maya lowlands contain a substantial population of Late Preclassic centres that were built and abandoned before the divine-kingship apparatus consolidated. Those are attempts, in the same environment with the same materials, that did not produce the architecture. They are a control group already excavated, and nobody has read them as one.

Until at least the second of those is done, the correct description of this paper's status is that it proposes a variable, derives three mechanisms from it, shows that four unconnected orders order themselves along it, and cannot yet exclude the possibility that the ordering is an artefact of what leaves traces.

Part X — Predictions

Stated so that they can fail.

P1 — The domestic signature is heroic individuals and no institutional capacity. In orders whose interpretive credential is issued by the state, one should find celebrated individual refusals that cost the refuser everything and changed nothing, and no instance of the interpretive body as such compelling a ruler. *Falsified if* a state-credentialled interpretive class is found to have mounted a sustained institutional challenge to its own ruler and made it stick.

P2 — Fused orders fail at the first genuinely contested succession and look healthy until then. A fused order's collapse should be datable to a succession with two or more claimants of comparable standing, not to gradual decline, external pressure or economic stress. *Falsified if* fused orders characteristically decay gradually, or survive contested successions at rates comparable to the other two.

P3 — Radius tracks issuance. The furthest extent at which an order can settle a dispute without force should equal the territory the claimant commands when fused, the state that issues the credential when domestic, or the area of recognition when foreign. *Falsified if* fused orders are found adjudicating disputes between polities neither party commanded.

P4 — Recognition, not capacity, bounds a foreign instrument. Where a foreign credential's recognition lapses, its instruments should cease to bind precisely and only among the parties who stopped recognising it, while continuing to bind those who did not. *Falsified if* lapsed recognition leaves the instrument working, or if unlapsed recognition fails to sustain it.

P5 — Repair requires corporateness independently of distance. Forks should be repairable in orders possessing a corporate interpretive body with procedural standing, including domestically-credentialled ones, and unrepairable where the credential is held only in persons. *Falsified if* a fork is mended in an order with no corporate interpretive institution, or if orders with such institutions fail to mend forks at rates comparable to those without.

P6 — Verifiability substitutes for distance. Orders whose anchor is publicly checkable by the people it binds — recited law, drawn lots, open procedure — should be markedly less sensitive to credential distance than orders whose anchor is esoteric.

Falsified if publicly-verifiable orders show the same dependence on interpreter independence as liturgical or calendrical ones.

P7 — Anchor quality and horizontal function are independent. Orders should exist with anchors scoring well on determinacy, unforgeability and common knowledge that nonetheless author no durable elite title, and their signature should be endemic warfare among the armed alongside cheap compliance from the mass. Hawaii is one instance; the prediction is that there are others, and that they will be fused. *Falsified if* high anchor scores reliably accompany durable elite title regardless of interpreter position.

And the architecture fails as a whole if this is found: **a fused order — one in which the claimants were their own interpreters — that durably settled disputes between polities none of them commanded, without conquest.** That is the case the argument says cannot exist.

Part XI — Where this is weak

Nine problems, two of which could sink the paper.

The three-point scale is coarse and the boundary between fused and domestic is a judgement. Hawaii and the Maya both have real interpretive classes and are scored fused on the grounds that the credential was issued by the principle that qualified the rulers. That is a defensible reading and it is a reading. A critic could score both as domestic and would then have to explain their behaviour differently — and might succeed. The scale needs a bright-line test for that boundary that I have not been able to formulate better than "could the ruler's own qualification serve as the interpreter's."

The restraint prediction is not testable in its negative half, for the reasons set out at length above. This is the paper's most serious internal problem and it is stated rather than solved.

The convergence circularity may not be escapable, and the three proposed remedies are proposals rather than results. Nobody has yet assembled a negative sample of fragmented orders lacking sacred legitimation, and it is possible that such a sample cannot be assembled because the category is invisible by construction rather than merely difficult.

Four cases is not a test. They are chosen, and chosen after the variable was formulated, and two of them come from earlier work in this project. Confirmation from four selected cases is weak evidence for a claim this general. What would count is the scale applied to twenty orders scored blind.

The radius claim may be a restatement of state capacity. The correlation between fusion and small radius could run entirely through logistics: societies without writing, without roads, without a standing bureaucracy have small polities for reasons that have nothing to do with where a credential sits, and the credential position may be a consequence of small scale rather than a cause of it. The Maya had writing and mathematics of a very high order and still fragmented, which is the best available answer, and it is one case.

The Hawaiian tenure claim is stronger than the sources uniformly support. Kālaiʻāina at every accession is well attested and there are counter-instances of patrimonial continuity — chiefs who inherited their father's lands as an estate. What the record supports is that elite tenure was *revocable in principle and frequently revoked in fact*, which is enough for the argument, but "no durable elite title existed" is too

absolute and should be read as "no elite title was authored by the anchor in a form that survived the grantor reliably."

Latin Christendom may be doing double duty. It supplies both the foreign-credential case and much of the theoretical vocabulary in which the variable was formulated, since the concepts of credential, investiture and corporate procedure are European in origin. A framework built from one case and then found to fit that case is not evidence.

The audience-verification modifier is currently unfalsifiable as stated, because I have not specified how to score verifiability independently of how much the interpreter mattered. Recited law and drawn lots are clear cases; almost everything else is a gradient with no measure.

And the two-audience separation may be doing too much work in the Hawaiian case. I have argued that the kapu bound the mass and not the elite. An alternative reading is that it bound the elite too, in ways that do not show up in tenure — through the rank system's regulation of marriage and precedence — and that what 1819 changed was more than the material record suggests. The tenure evidence is what I have; it is not everything there was.

Part XII — The excluded, and the discipline

Who bore this, and why reach is not a virtue.

This project holds that every study must name the people who were inside an order's coercive reach and outside its settlement, because that is where the violence concentrates and it is the finding most often missed by an analysis focused on how armed men stopped fighting each other.

A paper about credential distance owes this doubly, because its central finding is about **reach** — and reach is what the excluded experience.

In Hawaii the settlement never included the *maka'āinana*, the commoners who worked the taro fields and rendered the tribute, and it is worth being exact about what the kapu meant for them rather than treating it as an interesting mechanism. Prostration face-down in the dirt when a chief passed. Death for a shadow falling wrongly, for eating the wrong food, for touching the wrong object. And the condemned supplied the bodies for the temple sacrifices, so that the enforcement of the prohibitions and the ceremonial demand for victims were a single circuit. The system this paper has described as an efficient mass-compliance technology was, for the people compliant under it, a regime in which ordinary movement carried a capital risk. That the elite could abolish it in a season without anybody rising is not evidence that it was hollow. It is evidence about who was permitted to matter.

In the Maya lowlands the excluded are the commoners whose labour built the plazas and who appear on the monuments principally as captives — bound, stripped, named as trophies, and in a substantial number of cases sacrificed. The inscriptions that make this civilisation legible to us are, in large part, records of what was done to people who lost.

In Latin Christendom the reach that this paper credits as the variable's most impressive consequence is the same reach that authorised crusade, that organised the expulsion and massacre of Jewish communities across the same network of bishops and monasteries that carried the coordination, and that — at the outer edge celebrated in Part VI as the clearest demonstration of that radius — **partitioned two continents and their populations between two crowns without reference to anybody living there.** Tordesillas is offered above as evidence for a structural claim. It should also be

named for what it was: a line drawn through other people's worlds by parties who recognised each other and did not recognise them.

That is the general point and it is not incidental to the argument. **The variable predicts reach, and reach is morally neutral in exactly the way a lever is.** The order in this set that could coordinate across hundreds of units and eight centuries is the order that could also organise persecution and conquest at a scale the fused orders could not have contemplated. Fused orders cannot mount a crusade for the same reason they cannot settle a succession. There is no version of this finding in which the coordinating capacity can be admired and the other half set aside; they are one capacity.

Legibility is not pardon. This paper has been written in the register of measurement, because that register is clarifying and because vagueness about mechanism has protected more atrocity than it has prevented. But the register makes suffering sound like a variable, so it should be said once, plainly, outside it. The man who was killed for letting his shadow fall on a chief was not a data point about enforcement. The captives on the Maya stelae were not evidence of ritual elaboration. And the people on the far side of the line drawn at Tordesillas were not a demonstration of radius. They were people, and the instrument this paper admires for its reach is the instrument that reached them.

Conclusion

One question, asked of an appointment record.

The question this paper began with was why one high priest burned his own temples at a king's word and another brought an emperor to a mountain gate in winter. The answer proposed is that Gregory's qualification was issued somewhere Henry could not reach and Hewahewa's was not, and that this single fact — *who can revoke the interpreter's standing* — governs three things at once.

It governs **restraint**, because a refusal that cannot be survived never becomes an institution, however brave the individual refusers. It governs **coordination**, because the horizontal work of a settlement requires only that the source of title be singular, which fails absolutely when every claimant is his own interpreter and there are therefore as many sources as claimants. And with the addition of corporateness it governs **repair**, because mending a fork requires an institution with standing that is not identical to either of the forked parties, and an authority worn in a man's own body has no existence apart from him.

Four orders that never heard of one another sort along it. A steppe empire whose khagans read heaven's favour off their own victories fractured at its first contested succession. An archipelago whose chiefs carried the anchor in their own bodies made an entire population render tribute cheaply for centuries and never once authored a chiefly title that survived the man who granted it, and was abolished in a season by a king who did not have to break the rule because he could change it. A civilisation whose kings held, permanently and by title, the office of Keeper of the Holy Books coordinated brilliantly inside each city and never settled anything between them, and warred for six hundred years. And an empire whose bishops held a credential issued in another country restrained its emperors, coordinated hundreds of units across eight centuries, repaired its own schism, and at the limit of its reach divided the unexplored world along a line drawn by a man with no army — a line that bound precisely the states that recognised the office and not one more.

Which yields the claim the paper exists to make. The project's earlier work established that an anchor is a technology for scaling coordination past the number of people who can watch each other. **Credential distance is what sets the scale.** The radius of a settlement is the territory the claimant commands, or the state that issues

the credential, or the area in which the issuing office is recognised — and no order in this set exceeded its own bound.

And the paper's last finding is the one that limits all of that. The evidence by which restraint is observed is produced by the very independence that makes restraint possible, so its absence proves nothing; and for fragmented orders, the sacred apparatus that this project studies is the thing that makes such orders visible at all, which means the convergence on sacred legitimation may be a fact about what survives to be found rather than about what human societies do. The variable can be scored honestly, because appointment and funding records are kept by rulers rather than by priests. Whether the pattern it orders is a fact about the world remains open, and closing it requires going to the archives of the neighbours and to the sites that were abandoned before the monuments went up.

An anchor cannot arbitrate between two men who are both holding it. That is the whole of the mechanism, and everything else in this paper is an attempt to say how far away it has to be held, by whom, and how much of the answer we are in a position to see.

A note on sources and scholarship

Every borrowed idea is explained in the text rather than invoked on authority; this note gives the references and the reservations.

On the commitment problem. James D. Fearon, "Rationalist Explanations for War," *International Organization* 49:3 (1995). The application to warlordism among armed peers is this project's.

On coordination and third-party punishment. Barry R. Weingast, "The Political Foundations of Democracy and the Rule of Law," *American Political Science Review* 91:2 (1997), for the coordination model and the role of a shared standard in defining transgression. The horizontal application among armed peers is this project's extension.

On common knowledge and ceremony. Michael Suk-Young Chwe, *Rational Ritual: Culture, Coordination, and Common Knowledge* (2001).

On the division of labour and of knowing, and on conditional trust. Adam Smith, *The Wealth of Nations* (1776); Friedrich Hayek, "The Use of Knowledge in Society," *American Economic Review* 35:4 (1945); Dan Sperber et al., "Epistemic Vigilance," *Mind and Language* 25:4 (2010), and Hugo Mercier, *Not Born Yesterday* (2020). These are developed in this project's papers *The Necessary Seam* and *The Exploit*.

On the vertical/horizontal distinction. Established in this project's immediately preceding paper, *The Shape of the Sieve*, which this one begins from and extends. The present paper's contribution is the operational scale, the derivation of the three capacities, the radius claim and the archive circularity.

On the First Türk Khaganate. Bumin's assumption of the title of khagan in 552 and his death within months; his brother Istämi as *yabghu* of the west; the death of Taspar Qaghan in 581 and the civil war among four claimants; the permanent division into eastern and western khaganates in 603; the Tang conquests of 630 and the 650s. The evidence is overwhelmingly external — the Chinese dynastic histories for chronology and genealogy, Menander Protector for the Byzantine embassies of c. 569–571. The Bugut inscription raised for Taspar Qaghan c. 581–584 is in Sogdian. The Old Turkic Orkhon inscriptions of 716–735 belong to the *Second* Khaganate and postdate these events by roughly a century and a half. Inner Asian chronology and Ashina genealogy are actively debated and the Chinese sources have a standing interest in reporting steppe disunity; both cautions apply.

On Hawaii. The kapu system, mana, the *ahupua'a* and *makahiki*, and the abolition of 1819 follow the standard accounts, including Samuel Kamakau's *Ruling Chiefs of Hawaii*, David Malo's *Hawaiian Antiquities*, Valerio Valeri's *Kingship and Sacrifice* (1985), Patrick Kirch's *How Chiefs Became Kings* (2010) and Lilikalā Kameʻeleihiwa's *Native Land and Foreign Desires* (1992), and the earlier study in this series on which Part IV draws. **On kālaiʻāina** — the redistribution of lands by a new paramount, practised at peaceful accession as well as after conquest, on a revocable basis — the reading follows Kameʻeleihiwa as summarised in the standard reference literature, and the reservation recorded in Part XI stands: patrimonial continuity is also attested and the claim should be read as "revocable in principle and frequently revoked," not as the absence of any heritable tenure. The Māhele of 1848 and its consequences follow Chinen and Kameʻeleihiwa. Hewahewa's leading of the temple burnings follows the standard accounts and derives ultimately from Hawaiian tradition recorded after conversion, which is an interested source and is flagged as one.

On the Classic Maya. The political structure, the *k'uhul ajaw*, the *sajal*, and the calendar systems follow the standard literature, including Simon Martin and Nikolai Grube's *Chronicle of the Maya Kings and Queens*, Arthur Demarest's *Ancient Maya*, and Linda Schele and Mary Ellen Miller's *The Blood of Kings*. **On scribal recruitment** — that writing was a royal prerogative, that signed works identify scribes as royal princes and titled nobles, and that the sculptor of the Rosalila facade at Copán and the carvers of the Palenque sarcophagus panels were members of the ruling dynasty — the reading follows Stephen Houston and David Stuart, "Of Gods, Glyphs, and Kings: Divinity and Rulership among the Classic Maya," *Antiquity* 70 (1996), as reported in the reference literature. **On the *aj ch'ul hun* title** — Keeper of the Holy Books, held simultaneously by every *ajaw* — the reading follows the standard summaries of Maya courtly titulary; it is the single datum on which the fused classification of the Maya principally rests, and a reader who disputes it should dispute the classification. **On the historiography** — that Maya stelae were long believed to depict priests until decipherment established that they depict kings, and that a model of royal "shamanism" associated with Schele and Freidel then displaced the earlier priest-centred reading — the account follows the standard summaries of the field's development, and is used in Part V as evidence rather than as background.

On Latin Christendom. Canossa (January 1077) and the Concordat of Worms (1122) follow the standard literature on the Investiture Contest. The imperial structure follows Peter H. Wilson's *The Holy Roman Empire* (2016), including the "first among equals" formulation, and Barbara Stollberg-Rilinger's *The Emperor's Old Clothes* (2015). On the partition of 1493–94: Alexander VI's bulls set the original line, Spain

and Portugal renegotiated the meridian bilaterally at Tordesillas in June 1494, and a later papal confirmation followed; the bilateral renegotiation is important and is stated rather than elided, since the crowns bargained over where the line fell while accepting the office under which it was drawn. The non-recognition of the partition by France, England and the Dutch, and its collapse as an instrument after the Reformation, follow the standard accounts. The repair of the papal schism and the confessional settlements of 1555 and 1648 are treated in this project's earlier volumes.

On Iceland and Venice. The Icelandic lawspeaker's election by the assembly for fixed terms and his public recitation of a third of the law each year at the Alþingi, and the Venetian lot-based electoral procedure, follow this project's earlier case studies and the standard literature. Both are used here as instances of the audience-verification modifier rather than as full cases.

On what is not attempted. This paper makes no claim to original historical research in Inner Asian, Polynesian, Mesoamerican or medieval European history, all of which it enters as a visitor and in each of which it relies on the reference literature and on this project's earlier studies. Its contribution is analytical: to define a variable that can be scored from administrative records, to derive three distinct mechanisms from it, to show that four unconnected orders order themselves along it, and to state precisely how much of that ordering the available evidence can and cannot establish. Two of the four cases were worked in an earlier framework within this project and are re-read here rather than argued against; where the present reading revises the earlier one, the revision is stated in the text and the earlier study is left standing as written, so that the advance remains visible as something the evidence forced.